

**CLAIMS:**

1. A method on an end-user-system to prevent an unauthorized recording of multimedia content as a result of rendering of at least part of the multimedia content, the method comprising:

opening all multimedia content input devices and/or ports which are connected to an end-user-  
5 system that can receive at least a part of a multimedia content;

decrypting at least part of the multimedia content; and

rendering the at least part of the multimedia content which has been decrypted.

2. The method according to claim 1, wherein the step of opening all devices and/or ports, further  
10 comprises;

determining if a given device and/or port is capable of recording at least a part of the multimedia  
content at a predetermined quality level;

opening the given device and/or port if it is determined to be at or above the predetermined  
quality level; and

15 not opening the given device and/or port if the recording quality is determined to be below the  
predetermined level.

3. The method according to claim 1, wherein the step of opening all devices and/or ports, further  
comprises for each device and/or port;

20 determining if a given device and/or port is capable of receiving content at least equal to a  
predetermined quality level and if the given device and/or port is capable of receiving content at least  
equal to the predetermined quality then performing the step of:

determining if the given device and/or port is open and if the device and/or port is not open

then performing the step of;

25 opening the device and/or port.

4. The method according to claim 3, wherein the step of determining if the given device and/or port is open further comprises determining if the given device and/or port is not open and if the device and/or port is open previously then performing the step of:

determining if the given device and/or port is authorized to be opened;

5 returning an error message to an end user if the device and/or port is not authorized to be opened; and

stopping the rendering of the at least part of the multimedia content.

10 5. The method according to claim 1, wherein the step of rendering of at least a part of the multimedia content, further comprises:

completing the rendering of the at least a part of the multimedia content;

closing all waveout devices and/or ports that were used for rendering; and

closing all wavein devices and/or ports that were opened during rendering.

15 6. The method according to claim 4, wherein the step of determining if the given device and/or port is authorized to be opened includes authorizing a modem connection to be opened.

7. The method according to claim 3, further comprising the step of  
determining the number of wavein type devices and/or ports coupled to the end user system.

20 8. The method according to claim 7, wherein the step of determining the number of wavein type devices and/or ports coupled to the end user system includes using the Microsoft Windows API of wavein角度getnumdevs().

9. The method according to claim 1, wherein the step of decrypting at least part of the multimedia content further comprises the step of:

reading the encrypted multimedia content from a storage medium selected from a group of storage mediums consisting of disk drive, cassette tape; CD, DVD, diskette drive, network storage, Zip Drive, Compact Flash, Smart Flash and miniDisc.

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10. A computer readable medium containing programming instructions for an end-user system to prevent an unauthorized recording of multimedia content as a result of rendering of at least part of the multimedia content, the programming instructions comprising:

opening all multimedia content input devices and/or ports which are connected to an end-user-  
system that can receive at least a part of a multimedia content;  
decrypting at least part of the multimedia content; and  
rendering the at least part of the multimedia content which has been decrypted.

11. The computer readable medium according to claim 10, wherein the step of opening all devices and/or ports, further comprises programming instructions of;

determining if a given device and/or port can receive at least a part of the multimedia content at a predetermined quality level;

opening the given device and/or port if it is determined to be at or above the predetermined quality level; and

not opening the given device and/or port if the recording quality is determined to be below the predetermined level.

12. The computer readable medium according to claim 10, wherein the programming instruction of opening all devices and/or ports, further comprises programming instructions for;

determining if a given device and/or port is capable of receiving content at least equal to a predetermined quality level and if the given device and/or port is capable of receiving content at least equal to the predetermined quality then performing the step of:

determining if the given device and/or port is open and if the device and/or port is not open then performing the step of;

opening the device and/or port.

13. The computer readable medium according to claim 12, wherein the step of determining if the given device and/or port is open further comprises programming instruction for determining if the given device and/or port is not open and if the device and/or port is open previously then performing the programming instructions of:

- 5           determining if the given device and/or port is authorized to be opened;  
          returning an error message to an end user if the device and/or port is not authorized to be opened; and  
          stopping the rendering of the at least part of the multimedia content.

10       14. The computer readable medium according to claim 10, wherein the programming instruction of rendering of at least a part of the multimedia content, further comprises the programming instructions of:

- completing the rendering of the at least a part of the multimedia content;  
          closing all waveout devices and/or ports that were used for rendering; and  
15       closing all wavein devices and/or ports that were opened during rendering.

15. The computer readable medium according to claim 13, wherein the step of determining if the given device and/or port is authorized to be opened includes programming instructions for authorizing a modem connection to be opened.

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16. The computer readable medium according to claim 12, further comprising programming instruction of:

- determining the number of wavein type devices and/or ports coupled to the end user system.

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17. The computer readable medium according to claim 16, wherein the programming instruction of determining the number of wavein type devices and/or ports coupled to the end user system includes programming instructions for using the Microsoft Windows API of waveinGetNumDevs().

- 5 18. The computer readable medium according to claim 10, wherein the step of decrypting at least part of the multimedia content further comprises the programming instructions for:

reading the encrypted multimedia content from a storage medium selected from a group of storage mediums consisting of disk drive, cassette tape; CD, DVD, diskette drive, network storage, Zip Drive, Compact Flash, Smart Flash and miniDisc.

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19. An end-user-system comprising:

an interface to a storage media for storing encrypted digital content;

one or more wavein devices and/or ports that can record at least part of the encrypted digital content which has decrypted; and

5 a multimedia device and/or port for playing or rendering the encrypted digital content which has been decrypted;

whereby the one or more wavein devices and/or ports are opened prior to the playing or rendering of the encrypted digital content so as to block each of the wavein devices and/or ports from recording of the decrypted digital content.

10 20. The end-user-system according to claim 19, wherein the one or more wavein devices and/or ports can be opened or closed independently of the other wavein devices and/or ports.

21. The end-user-system according to claim 20, further comprising:

15 means to determine a recording quality of at least one of the one or more wavein devices and/or ports and if the recording quality is below a predetermined quality level then not opening the wavein device and/or port prior to playing or rendering of the encrypted digital content.